42-5067.fm Page 1 Thursday, August 12, 1999 10:10 AM

Cat. No. 42-5067

OWNER'S MANUAL

Please read before using this equipment.

CD-3580

Portable Compact Disc Player

OPTIMUS®

42-5067.fm Page 2 Thursday, August 12, 1999 10:10 AM

FEATURES

Your Optimus CD-3580 Portable Compact Disc Player uses the latest digital audio technology to give you the clean, crisp sound of compact discs. You can connect the CD player to your home audio system, or connect a pair of stereo earphones for portable, private listening. Its unique digital anti-shock system virtually eliminates skips caused by sudden shocks.

The CD player's features include:

Digital Anti-Shock System (DAS²) — rapidly scans data from the CD and stores it in memory for uninterrupted play with no sound skip even when the CD player is exposed to shocks or vibration, making this CD player excellent for use with your auto sound system.

Eight-Times Oversampling with Digital Filtering — improves the CD's sound by multiplying the standard 44.1 kHz sample rate by eight and using a digital filter to reduce or eliminate distortion.

1-Bit DAC — uses the latest in digital-to-analog conversion circuitry to accurately reproduce all sound levels with virtually no distortion.

BASS Switch — lets you adjust the frequency response to match the type of music you listen to.

Automatic Search Music System (ASMS) — lets you quickly locate and play any track on a CD.

Audible Search — helps you locate a particular section of a track by rapidly playing the CD in either direction.

Programmable Play — lets you program and play up to 22 tracks in any sequence you choose.

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RadioShack is a trademark used by Tandy Corporation.

42-5067.fm Page 3 Thursday, August 12, 1999 10:10 AM

Repeat Play — lets you automatically repeat a single track, an entire CD, randomly selected tracks, or a programmed sequence of tracks.

Pause — lets you temporarily stop playback of a CD and start it again from the same point.

Intro Scan — helps you locate a desired track by playing the first 10 seconds of each track on the CD.

Auto Power On/Off — automatically turns power on when you load a CD, so you can immediately begin play; and turns power off when all tracks finish, to save power.

Hold Function — prevents you from accidentally changing the CD's programmed play sequence, and preserves battery life by locking all controls when you turn off the CD player.

Three Power Sources — let you power your CD player from AA batteries, standard AC power (using an optional AC adapter), or your vehicle's battery (using an optional DC adapter).

Built-In Battery Charger — recharges the battery inside the CD player when you use a special-order nickel-cadmium battery pack.

5- and 3-Inch CD Compatible

Important: You need a pair of stereo earphones or amplified speakers or a home audio or auto sound system to use your CD-3580. Your local RadioShack store carries a complete line of earphones, amplified speakers, and audio systems.

The CD player's advanced technology makes it simple to operate. Be sure you read this Owner's Manual completely so you can take advantage of all the CD player's advanced features.

42-5067.fm Page 4 Thursday, August 12, 1999 10:10 AM

We recommend you record the CD player's serial number here. The number is in the battery compartment.

Serial Number _____

CDs that can be played on this player have this mark on them:

FCC INFORMATION

This equipment complies with the limits for a Class B digital device as specified in Part 15 of *FCC Rules*. These limits provide reasonable protection against radio and TV interference in a residential area. However, your equipment might cause TV or radio interference even when it is operating properly. To eliminate interference, you can try one or more of the following corrective measures:

- Increase the distance between the CD player and the radio or TV.
- Use outlets on different electrical circuits for the CD player and the radio or TV.
- Consult your local RadioShack store if the problem still exists.

42-5067.fm Page 5 Thursday, August 12, 1999 10:10 AM

CONTENTS

Choosing a Power Source 7
Using Batteries 7
Installing Batteries 7
Charging a Nickel-Cadmium Battery Pack 8
Charging Tips 9
Using AC Power 10
Using Vehicle Battery Power 11

Connections 13
Connecting Earphones 13
Listening Safely 13
Traffic Safety 14
Connecting Amplified Speakers 14
Connecting to a Home Audio System 15
Connecting to an Auto Sound System 15

Operation 17
Playing a CD 17
Digital Anti-Shock System (DAS²) 18
Locking the Controls 19
Pause 19
Bass Switch 20
Checking Remaining Time 20
Intro Scan 21
Automatic Search Music System (ASMS) 21
Audible Search 22

42-5067.fm Page 6 Thursday, August 12, 1999 10:10 AM

Programmed Play 22
Checking, Adding To, Replacing, or Clearing the Programmed Sequence 24
Repeat Play 24

Troubleshooting 26

Care and Maintenance 27
Caring for the CD-3580 27
CD Care Tips 29
Laser Safety 29

Specifications 30

42-5067.fm Page 7 Thursday, August 12, 1999 10:10 AM

CHOOSING A POWER SOURCE

You can power your CD player from:

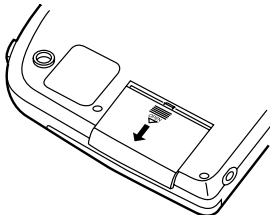
- Two AA alkaline batteries (not supplied) or one special-order rechargeable nickel-cadmium battery pack (not supplied)
- Standard AC power, using an AC adapter (not supplied)
- A vehicle's battery power, using a DC adapter (not supplied)

USING BATTERIES

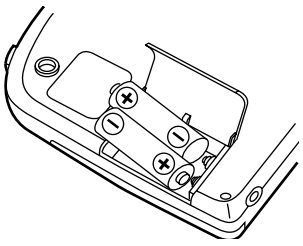
You can power your CD player from two AA alkaline batteries, such as RadioShack Cat. No. 23-552, or one special-order rechargeable nickel-cadmium battery pack (Cat. No. RSU 11649035, available through your local RadioShack store). The CD player can recharge the special-order nickel-cadmium battery pack while it is in the CD player.

Installing Batteries

1. Slide the battery compartment cover in the direction of the arrow, then lift it open.



2. Place two AA batteries or the special-order nickel cadmium battery pack in the compartment as indicated by the polarity symbols (+ and –) marked inside the compartment.



Cautions:

- Use only batteries of the required size and type.
- Never mix fresh and old batteries, alkaline and nickel-cadmium batteries, or nickel-cadmium batteries of different capacities.
- If you do not plan to use the CD player for a month or more, or you plan to power it only from an optional AC or DC adapter, remove and store the batteries.

3. Close the battery compartment cover.

When the batteries become weak, flashes, then the CD player automatically turns off. Replace alkaline batteries or recharge the nickel-cadmium battery pack when this happens.

Cautions:

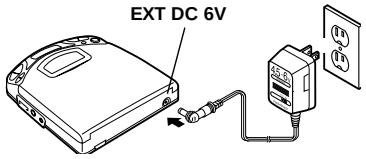
- Always dispose of old batteries promptly and properly.
- Never heat, disassemble, or throw batteries into a fire.
- Never leave dead, old, or weak batteries in the CD player. Batteries can leak chemicals that corrode or damage electronic circuits.

Charging a Nickel-Cadmium Battery Pack

The nickel-cadmium battery pack comes fully discharged. You can charge the special-order battery pack while it is in the battery compartment using an AC adapter (such as Cat. No. 273-1664, not supplied) or DC adapter (such as Cat. No. 273-1801, not supplied). See “Using AC Power” on Page 10 and “Using Vehicle Battery Power” on Page 11.

42-5067.fm Page 9 Thursday, August 12, 1999 10:10 AM

Follow these steps to recharge a nickel-cadmium battery pack while it is in the battery compartment.



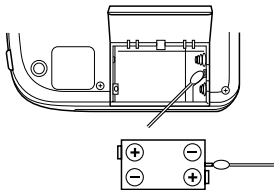
1. Set the tip polarity on the adapter to positive (+), and set the adapter's voltage switch to 6V.
2. Insert the adapter's 4.0 mm outer diameter/1.7 mm inner diameter barrel plug into the CD player's **EXT DC 6V** jack.
3. Plug the adapter's other end into your vehicle's cigarette lighter socket or a standard AC outlet.
4. When the nickel-cadmium battery pack fully charges, unplug the adapter, then disconnect the adapter from the CD player.

Notes:

- It takes about 10 hours for the CD-3580 to charge a fully discharged nickel-cadmium battery pack.
- You can play a CD while recharging the battery pack; however, this could cause the battery pack to recharge more slowly.

Charging Tips

- Always keep the charging terminals clean. Use a cotton swab dipped in alcohol to clean the terminals.



- Under normal usage conditions, the nickel-cadmium battery pack can be recharged about 500 times.

42-5067.fm Page 10 Thursday, August 12, 1999 10:10 AM

- Fully discharge the battery pack occasionally by playing the CD player until it no longer plays. Then fully recharge the battery pack. This helps restore the battery pack's full charging capacity.
- Avoid charging the battery pack in a hot environment (more than 113°F) as this can permanently reduce the battery pack's charging capacity.
- Do not overcharge the battery pack. Overcharging can severely reduce a battery pack's useful life.
- Do not short-circuit the battery pack's terminals (+ and –).

Important: This portable CD player is capable of using a rechargeable nickel-cadmium battery pack. At the end of its useful life, the battery pack must be recycled or disposed of properly. Contact your local, county, or state hazardous waste management authorities for information on recycling or disposal programs in your area. Some options that might be available are: municipal curb-side collection, drop-off boxes at retailers, recycling collection centers, and mail-back programs.

USING AC POWER

You can power the CD player from standard AC power using an AC adapter, such as Cat. No. 273-1664 (not supplied).

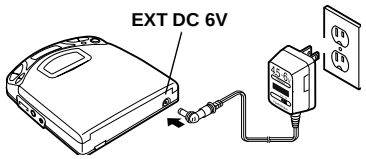
Cautions:

- You must use an AC adapter that supplies 6 volts and delivers at least 550 milliamps. Its center tip must be set to positive, and its plug must correctly fit the CD player's **EXT DC 6V** jack. The recommended AC adapter meets these specifications. Using an adapter that does not meet these specifications could damage the CD player or the adapter.

42-5067.fm Page 11 Thursday, August 12, 1999 10:10 AM

- When you finish using the AC adapter, disconnect it from the AC outlet first, then unplug it from the CD player.

Follow these steps to use an AC adapter.



1. Attach the 4.0 mm outer diameter/1.7 mm inner diameter barrel plug to the adapter cord, matching the positive (+) on the plug with TIP on the cord.
2. Set the adapter's voltage switch to 6V.
3. Insert the adapter's barrel plug into the CD player's **EXT DC 6V** jack.

   Note: Battery power disconnects when you connect an AC adapter to the CD player (unless you are using a special-order nickel-cadmium battery pack).
4. Plug the other end of the adapter into a standard AC outlet.

USING VEHICLE BATTERY POWER

You can power your CD player from your vehicle's battery using an optional DC adapter, such as Cat. No. 273-1801.

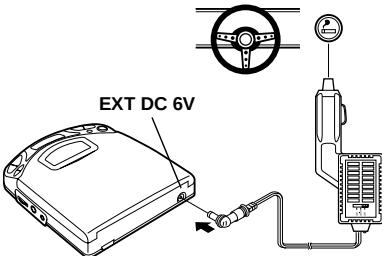
Cautions:

- You must use a DC adapter that supplies 6 volts and delivers at least 550 milliamps. Its center tip must be set to positive, and its plug must correctly fit the CD player's **EXT DC 6V** jack. The recommended adapter meets these specifications. Using an adapter that does not meet these specifications can damage the CD player or the adapter.

42-5067.fm Page 12 Thursday, August 12, 1999 10:10 AM

- Disconnect the adapter from the cigarette-lighter socket after you turn off the vehicle to prevent the vehicle's battery from being drained.
- Always disconnect the adapter from the cigarette-lighter socket before you unplug it from the CD player.
- If you park your vehicle in the sun, temperatures inside can easily reach levels that could damage your CD player and your CDs. To prevent heat damage, avoid leaving your CD player or CDs in your vehicle.

Follow these steps to use your vehicle's battery power.



1. Attach the 4.0 mm outer diameter/1.7 mm inner diameter barrel plug to the adapter cord, matching positive (+) on the plug with TIP on the cord.
2. Set the adapter's voltage switch to 6V.
3. Insert the adapter's barrel plug into the CD player's **EXT DC 6V** jack.

   Note: Battery power disconnects when you connect a DC adapter to the CD player (unless you are using a special-order nickel-cadmium battery pack).
4. Plug the other end of the adapter into your vehicle's cigarette-lighter socket.

42-5067.fm Page 13 Thursday, August 12, 1999 10:10 AM

CONNECTIONS

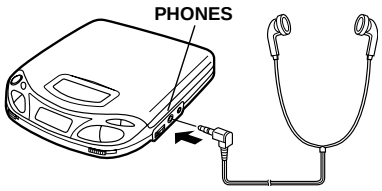
You can listen to your CD player by connecting stereo earphones or amplified speakers to the player's **PHONES** jack, or by connecting the player's **LINE OUT** jack to a home audio or auto sound system. Your local RadioShack store carries a variety of earphones, amplified speakers, cassette adapters, cable adapters, and audio patch cables.

Notes:

- If you use the CD player's **PHONES** jack, use the CD player's **VOLUME** control (and the volume control of the amplified speakers) to adjust the volume.
- If you use the CD player's **LINE OUT** jack, use the home audio or auto sound system's volume control to adjust the volume.

CONNECTING EARPHONES

For private listening, plug a pair of stereo earphones with a $^1/_8$-inch plug (not supplied) into the CD player's **PHONES** jack.



Listening Safely

To protect your hearing, follow these guidelines when you use earphones.

- Set the volume to the lowest setting before you begin listening. After you begin listening, adjust the volume to a comfortable level.

42-5067.fm Page 14 Thursday, August 12, 1999 10:10 AM

- Do not listen at extremely high volume levels. Extended high-volume listening can lead to permanent hearing loss.
- Once you set the volume, do not increase it. Over time, your ears adapt to the volume level, so a volume level that does not cause discomfort might still damage your hearing.

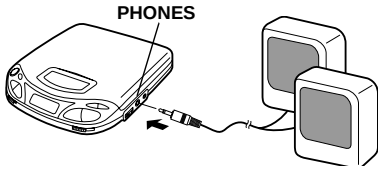
Traffic Safety

Do not wear earphones while operating a motor vehicle or riding a bicycle. This can create a traffic hazard and can be illegal in some areas.

Even though some earphones let you hear some outside sounds when listening at normal volume levels, they still can present a traffic hazard.

CONNECTING AMPLIFIED SPEAKERS

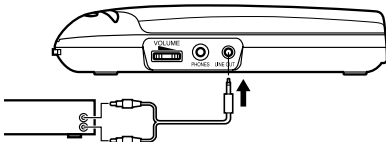
To listen to your CD player through amplified speakers (not supplied), plug the amplified speakers' $^1/_8$-inch plug into the CD player's **PHONES** jack.



42-5067.fm Page 15 Thursday, August 12, 1999 10:10 AM

CONNECTING TO A HOME AUDIO SYSTEM

To listen to your CD player through your home audio system's amplifier/receiver and full-size speakers, connect the supplied Y-cable's $^1/_8$-inch plug to the CD player's **LINE OUT** jack. Then connect the Y-cable's phono plugs to the CD, AUX, or TV audio LEFT and RIGHT input jacks on your amplifier/receiver. (If the jacks on your equipment do not match the plugs on the Y-cable, check with your local RadioShack store for the proper cable adapter.)

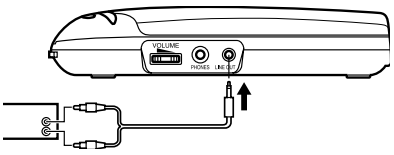


Amplifier/Receiver with LEFT and RIGHT Input Jacks

CONNECTING TO AN AUTO SOUND SYSTEM

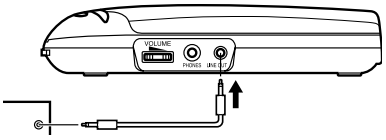
You can connect your CD player to your stereo auto sound system in one of three ways.

If your auto sound system has LINE IN jacks — plug the supplied Y-cable's $^1/_8$-inch plug into the CD player's **LINE OUT** jack. Then connect the Y-cable's phono plugs to your auto sound system's LINE IN input jacks. (If the jacks on your equipment do not match the plugs on the cable, check with your local RadioShack store for the proper cable adapter.)



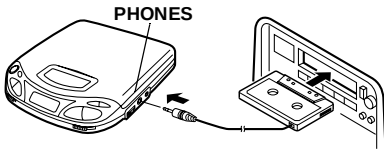
Auto Sound System with Two LINE IN Jacks

If your auto sound system has a CD input jack — you need a stereo 1/8-inch patch cable, such as Cat. No. 42-2387. Connect one end to the CD player's **LINE OUT** jack and the other end to the auto sound system's CD INPUT jack.



Auto Sound System with CD Input Jack

If your auto sound system has a cassette player — you need a CD-to-cassette adapter, such as Cat. No. 12-1951. Insert the adapter into your car's cassette player just as you would insert a regular cassette. Then connect the CD-to-cassette adapter's cord into the CD player's **PHONES** jack.



You can mount your CD player in your car using a CD mounting bracket. Your local RadioShack store has a complete line of mounting kits.

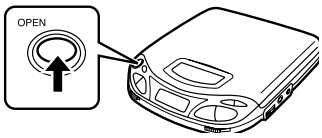
42-5067.fm Page 17 Thursday, August 12, 1999 10:10 AM

OPERATION

PLAYING A CD

1. Set **VOLUME** to the minimum level and move **HOLD** to the off position.

2. Press **OPEN** and lift the disc compartment cover.



3. Carefully place the CD, label side up, over the disc compartment's center hub. Press down slightly on the CD until it clicks and lies flat in the compartment. Then close the disc compartment cover.

   The display briefly shows a flashing **– –**, then the total number of tracks and the CD's total playing time. After about 10 seconds, the CD player displays **00** briefly, then turns off.

4. Press ►/▮▮. The display briefly shows a flashing **– –**, then the first track begins to play. The display shows the current track number and elapsed time.

5. Adjust the volume to a comfortable listening level.

   - If you connected earphones, amplified speakers, or a CD-to-cassette adapter to the CD player's **PHONES** jack, set **VOLUME** to the desired level.
   - If you connected the CD player's **LINE OUT** jack to amplified speakers, your home audio system, or your auto sound system, use the volume controls on those units to set the desired volume as needed.

42-5067.fm Page 18 Thursday, August 12, 1999 10:10 AM

Caution: This CD player has a wide dynamic range. If you turn up your amplifier's volume too high during soft (low volume) parts of the music, you might damage your speakers when a sudden loud passage occurs.

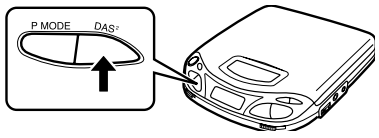
6. When the last track finishes playing, the CD player automatically stops and turns off in about 10 seconds.

To stop playing the CD before it ends, press ■. The display shows **00** for about 10 seconds, then the CD player automatically turns off.

DIGITAL ANTI-SHOCK SYSTEM (DAS²)

Your CD-3580 contains special circuits to overcome sound skipping problems caused by shock or vibration. This means you can carry the CD player anywhere you go or use it in your vehicle. When you turn on the anti-shock system, the CD player continuously saves the next few seconds of music in memory. During a shock or vibration that would normally make a track skip or pause, the CD player plays directly from memory.

During play, press **DAS²** to turn on the anti-shock system. The sound briefly stops, then ⌊ _ appears on the display and quickly changes to ⌊▬ then FULL as the music is stored in memory.



When the CD player is subjected to a shock during play, the music stored in memory plays and the amount of storage in FULL begins to decrease. When the shock is over and the CD player can properly read the CD again, music is once again stored in memory, and ⌊ _ changes to FULL.

42-5067.fm Page 19 Thursday, August 12, 1999 10:10 AM

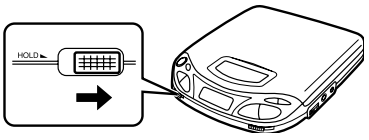
Notes:

- If shocks are received repeatedly, the memory is quickly used. When appears (showing empty), the sound might skip.
- The CD player consumes additional battery power when you use the anti-shock system. When you use the player in a stable location, turn off the system to conserve battery power.

To turn off the anti-shock system, press **DAS²** again. The sound briefly stops, then FULL disappears from the display.

LOCKING THE CONTROLS

To prevent accidentally turning the CD player on or off, or changing the track you are listening to, set **HOLD** to the on position. **HoLd** briefly appears, then no controls work (except **OPEN**, **VOLUME**, and **BASS**).

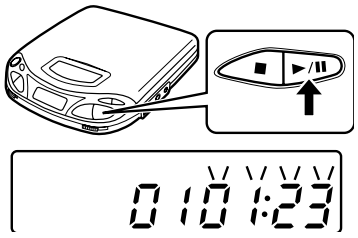


If you press any button other than **OPEN**, **VOLUME**, or **BASS** when **HOLD** is set to the on position, **HoLd** briefly appears.

Move **HOLD** to the off position to operate the controls again.

PAUSE

To temporarily pause play, press ►/▮▮. The time indicator flashes on the display. Press ►/▮▮ again to resume play.

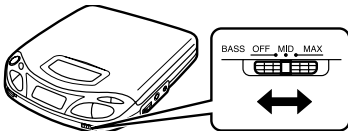


42-5067.fm Page 20 Thursday, August 12, 1999 10:10 AM

Note: If the CD player is paused for more than about 3 minutes, it automatically turns off.

BASS SWITCH

Use **BASS** to adjust the frequency response of the system to match the type of music you listen to.



MAX — boosts low frequencies so these sounds do not drop out when you listen at low volume levels.

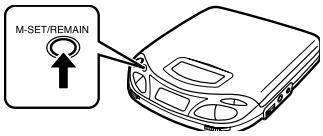
MID — uses a smaller bass boost than **MAX**.

OFF — maintains flat (even) frequency response.

Note: If you connect the CD player to your home audio or auto sound system using the **LINE OUT** jack, **BASS** has no effect.

CHECKING REMAINING TIME

During normal play or pause, press **M-SET/REMAIN** to display the remaining time on the current track.



Note: The CD player does not show the remaining time when track number 31 (or higher) is playing (the display shows **– – : – –**).

Press **M-SET/REMAIN** again to display the number of remaining tracks and the CD's total remaining time.

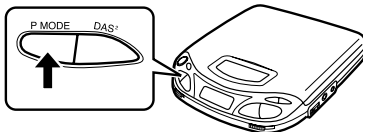
Press **M-SET/REMAIN** again to return to the normal display.

42-5067.fm Page 21 Thursday, August 12, 1999 10:10 AM

INTRO SCAN

The intro scan feature automatically plays the first 10 seconds of each track on a CD.

1. Repeatedly press **P MODE** until **INTRO** flashes on the display.



2. Press ►/❚❚. **INTRO** lights steadily, and intro scan starts from the first track.

To return to normal play, press ►/❚❚ again while the desired track is playing. Normal play continues from the beginning of that track.

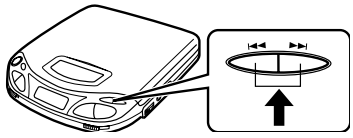
To cancel intro scan, press ■ or repeatedly press **P MODE** until no indicator appears.

Note: Intro scan does not play the tracks in a programmed sequence (see "Programmed Play" on Page 22).

AUTOMATIC SEARCH MUSIC SYSTEM (ASMS)

You can use ASMS before or during regular or programmed play to quickly locate any track on a CD.

During play, press |◄◄ to return to the beginning of the current track. Press |◄◄ again to return to the beginning of the previous track.



To move to the beginning of the next track, press ►►|.

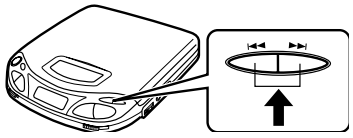
42-5067.fm Page 22 Thursday, August 12, 1999 10:10 AM

While the CD is stopped, repeatedly press ⏮ or ⏭ to move backward or forward to the desired track. Then press ▶/⏸ within 10 seconds to play the track.

AUDIBLE SEARCH

Use audible search during play to rapidly search forward or backward to locate a specific section of a track. During audible search, the CD plays at a lower volume and a higher speed.

To search forward, press and hold ⏭. To search backward, press and hold ⏮.



To resume normal play, release the button.

Notes:

- If you press and hold down ⏭ while the last track plays, the CD player automatically stops and turns off at the end of the track.
- If you press and hold down ⏮ while the first track plays, normal play automatically starts from the beginning of the first track.

PROGRAMMED PLAY

You can program up to 22 tracks on a CD to play in any order you choose, and even program the same track to play more than once.

Follow these steps to program a sequence.

1. Repeatedly press **P MODE** until M and **00** flash on the display. Selection number **01** appears on the display.

42-5067.fm Page 23 Thursday, August 12, 1999 10:10 AM

Note: As you press **P MODE**, M appears on the display with ⌐¬ and without ⌐¬. You can program the CD player in either mode.

2. Repeatedly press either ▶▶| or |◀◀ to display the number of the first track you want to program.
3. Press **M-SET/REMAIN** to store the selected track number. The selection number advances by one and the track number on the display returns to **00**.
4. Repeat Steps 2 and 3 for each track you want to program, up to 22 tracks.

   Note: The CD player automatically begins to play if you program 22 tracks.
5. To play the programmed sequence, press ▶/❚❚. M appears steadily and the first track in the sequence plays.

   While you play the programmed sequence, you can use ▶▶| to move forward or |◀◀ to move backward in the sequence.
6. After the last programmed track ends, the CD player stops.

At the end of programmed play, M disappears from the display, but the programmed sequence is still in the player's memory.

Notes:

- To return to normal play from programmed play, repeatedly press **P MODE** until M disappears from the display.
- To replay the programmed sequence, repeatedly press **P MODE** until M appears on the display. Then press ▶/❚❚ within 10 seconds to play the sequence.

42-5067.fm Page 24 Thursday, August 12, 1999 10:10 AM

Checking, Adding To, Replacing, or Clearing the Programmed Sequence

To check the programmed sequence, repeatedly press **P MODE** until the first programmed track number and M flash on the display. Then repeatedly press **M-SET/REMAIN**. Each time you press **M-SET/REMAIN**, the display shows the number of the next track in the sequence.

To add to the end of a programmed sequence, repeatedly press **P MODE** until the first programmed track number and M flash on the display. Then repeatedly press **M-SET/REMAIN** until **00** flashes on the display. Press ▶▶| or |◀◀ to display the new track number you want to program. Then press **M-SET/REMAIN**.

Note: You cannot program more than 22 tracks.

To replace a programmed track, repeatedly press **P MODE** until the first programmed track number and M flash on the display. Then repeatedly press **M-SET/REMAIN** to view the track numbers in the programmed sequence. When the track number you want to replace flashes on the display, press ▶▶| or |◀◀ to select the track you want to program in its place. Then press **M-SET/REMAIN** to program the new track number.

To clear the programmed sequence from memory, press ■ to stop the CD player, then press **OPEN**.

REPEAT PLAY

Your CD player can repeatedly play a single track, the entire CD, randomly selected tracks, or a programmed sequence (see “Programmed Play” on Page 22).

42-5067.fm Page 25 Thursday, August 12, 1999 10:10 AM

To repeat a single track, repeatedly press **P MODE** until ↻ and **1** appear on the display. At the end of the track, the CD player repeatedly plays it.

To repeat an entire CD, repeatedly press **P MODE** until ↻ and **ALL** appear on the display. When the CD player reaches the end of the CD, it returns to the first track and repeatedly plays all the tracks.

To repeat randomly selected tracks, repeatedly press **P MODE** until ↻ and **RANDOM** appear on the display. All tracks on the CD repeatedly play in random order.

To repeat a programmed sequence, repeatedly press **P MODE** during play until ↻ appears and M and the first programmed number flash on the display. Then press ►/❚❚. M and a track number light steadily and the programmed sequence repeatedly plays.

To cancel repeat play, press ■ or repeatedly press **P MODE** until no indicator appears.

42-5067.fm Page 26 Thursday, August 12, 1999 10:10 AM

TROUBLESHOOTING

If you have problems operating your CD player, check this chart for a solution. If these suggestions do not solve the problem, contact your local RadioShack store for assistance.

Problem	Possible Cause	Remedy
Operation buttons do not work.	Hold function is active.	Set **HOLD** to the off position.
	No power.	Check the batteries or adapter.
CD is loaded but it does not start.	CD is loaded upside down.	Reload the CD, label side up.
	CD is dirty.	Clean the CD or try a different CD.
	Insufficient power.	Use a recommended AC/DC adapter.
	Weak batteries.	Replace alkaline batteries or recharge the nickel-cadmium battery pack.
The sound skips.	CD is dirty or scratched.	Clean the CD or try a different CD. See “CD Care Tips” on Page 29.
	Vibration is heavy.	Activate the anti-shock system.
		Try not to vibrate the CD player.
The CD player suddenly stops operating.	Weak batteries.	Replace alkaline batteries or recharge the nickel-cadmium battery pack.

42-5067.fm Page 27 Thursday, August 12, 1999 10:10 AM

CARE AND MAINTENANCE

CARING FOR THE CD-3580

Your Optimus CD-3580 Portable Compact Disc Player is an example of superior design and craftsmanship. The following suggestions will help you care for the CD player so you can enjoy it for years.

Keep the CD player dry. If it gets wet, wipe it dry immediately. Liquids can contain minerals that corrode the electronic circuits.

Handle the CD player gently and carefully. Dropping it can damage the circuit board and case, and can cause the player to work improperly.

Keep the CD player away from dust and dirt, which can cause premature wear of parts.

Wipe the CD player with a damp cloth occasionally to keep it looking new. Do not use harsh chemicals, cleaning solvents, or strong detergents to clean the CD player.

Use and store the CD player only in normal temperature environments. Temperature extremes can shorten the life of electronic devices, damage batteries, and distort or melt plastic parts.

42-5067.fm Page 28 Thursday, August 12, 1999 10:10 AM

Use only fresh batteries of the required size and type. Always remove old or weak batteries. Batteries can leak chemicals that destroy electronic circuits.

Modifying or tampering with the CD player's internal components can cause a malfunction and might invalidate the CD player's warranty and void your FCC authorization to operate it. If your CD player is not performing as it should, take it to your local RadioShack store for assistance.

42-5067.fm Page 29 Thursday, August 12, 1999 10:10 AM

CD CARE TIPS

- If you move the player from a very cold room to a warmer one, moisture can condense on the pickup lens, preventing proper CD play. If this happens, wait 30 minutes before resuming play.
- Do not place anything but a CD in the disc tray. This can damage the drive mechanism.
- During play, a severe shock or jolt could make the CD's rotation speed change suddenly and produce some noise. This is not a malfunction.
- Always handle a CD by the edges and keep it in its protective case or sleeve when it is not in use. Fingerprints and scratches on the CD's surface can prevent the laser beam from correctly reading the digital information. To clean the CD, use a CD cleaner kit (RadioShack Cat. No. 42-226).
- A scratch on the CD's surface can make the CD skip or stop playing. If the CD gets scratched, use Scratch 'n Fix (RadioShack Cat. No. 42-127) to repair the scratch.
- Keep CDs dry. A water drop can act as a lens and affect the laser beam focus.

LASER SAFETY

This unit employs a laser. Only qualified service persons should remove the cover or attempt to service this device, due to possible eye injury.

Warning: The use of controls or adjustments or the performance of procedures other than specified herein can result in hazardous exposure to laser light.

42-5067.fm Page 30 Thursday, August 12, 1999 10:10 AM

SPECIFICATIONS

AUDIO (at LINE OUT)

Frequency Response (± 3 dB) ..... 20–20,000 Hz

Dynamic Range ..... 86 dB

Signal-to-Noise Ratio ..... 84 dB

Harmonic Distortion at 1 kHz 0.1%

Separation at 1 kHz ..... 63 dB

Wow/Flutter ..... Not Measurable

Earphones Output (10% THD at 16 ohm) ..... 10 mw

Line Output ..... 0.65 V

DISC

Diameter ..... Standard 5-Inch and 3-Inch CDs

SIGNAL FORMAT

Sampling Frequency ..... 44.1 kHz

Oversampling ..... 8 Times

Quantization Number ..... 1-Bit Linear/Channel

Transmission Bit Rate ..... 4.3218 MB/Second

Signal-Processing Rate ..... 352.8 kHz

42-5067.fm Page 31 Thursday, August 12, 1999 10:10 AM

PICK-UP

Tracking System ..... 3-Beam Tracking Servo Type

Object Lens Drive System ..... 2-Dimensional Parallel Drive

Optical Source ..... Semiconductor Laser

Wavelength ..... 785 nm

GENERAL

Power Requirements ..... DC 3V
Two AA Size Alkaline Batteries
or Rechargeable Nickel-Cadmium
Battery Pack (Not Included),
Optional AC Adapter (273-1664), or
Optional DC Adapter (273-1801)

Power Consumption ..... 2 W

Battery Life (EIAJ Method) ..... 8 Hours

Dimensions (HWD) ..... $1^{1}/_{16} \times 5 \times 5^{9}/_{16}$ Inches ($27 \times 127.8 \times 141.3$ mm)

Weight (without batteries) ..... 8.4 oz (238 g)

Included Accessory ..... Y-Cable

Specifications are typical; individual units might vary. Specifications are subject to change and improvement without notice.

42-5067.fm Page 32 Thursday, August 12, 1999 10:10 AM

RadioShack Limited Warranty

This product is warranted against defects for 1 year from date of purchase from RadioShack company-owned stores and authorized RadioShack franchisees and dealers. Within this period, we will repair it without charge for parts and labor. Simply **bring your RadioShack sales slip** as proof of purchase date to any RadioShack store. Warranty does not cover transportation costs. Nor does it cover a product subjected to misuse or accidental damage.

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This warranty gives you specific legal rights and you may also have other rights which vary from state to state.

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